

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.                                              | FILING DATE           | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------------------------------|-----------------------|----------------------|---------------------|------------------|
| 10/658,648                                                   | 09/09/2003            | John D. Morris       | 5621-P1             | 3164             |
| 49459 7590 04/11/2007<br>NALCO COMPANY<br>1601 W. DIEHL ROAD |                       |                      | EXAMINER            |                  |
|                                                              |                       |                      | DESAI, RITA J       |                  |
| NAPERVILLE, IL 60563-1198                                    |                       |                      | ART UNIT            | PAPER NUMBER     |
|                                                              |                       |                      | 1625                |                  |
|                                                              |                       |                      |                     |                  |
| SHORTENED STATUTOR                                           | RY PERIOD OF RESPONSE | MAIL DATE            | DELIVERY MODE       |                  |
| 3 MONTHS                                                     |                       | 04/11/2007           | PAPER               |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Application No.                                                                                                     | Applicant(s)                                         |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|--|--|--|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 10/658,648                                                                                                          | MORRIS ET AL.                                        |  |  |  |
| Office Action Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Examiner                                                                                                            | Art Unit                                             |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Rita J. Desai                                                                                                       | 1625                                                 |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                     |                                                      |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                                                                                                                     |                                                      |  |  |  |
| Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                     |                                                      |  |  |  |
| 1) Responsive to communication(s) filed on 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ) January 2007.                                                                                                     | •                                                    |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ T                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.                                                        |                                                      |  |  |  |
| • **                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |                                                      |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                     |                                                      |  |  |  |
| Disposition of Claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                     |                                                      |  |  |  |
| 4) ⊠ Claim(s) 1-31 is/are pending in the application 4a) Of the above claim(s) 3-31 is/are withdrates 5) □ Claim(s) is/are allowed.  6) ⊠ Claim(s) 1 and 2 is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | awn from consideration.                                                                                             |                                                      |  |  |  |
| Application Papers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                     |                                                      |  |  |  |
| 9) The specification is objected to by the Exam 10) The drawing(s) filed on is/are: a) a Applicant may not request that any objection to the Replacement drawing sheet(s) including the con 11) The oath or declaration is objected to by the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | accepted or b) objected to by the the drawing(s) be held in abeyance. Serection is required if the drawing(s) is ob | e 37 CFR 1.85(a).<br>jected to. See 37 CFR 1.121(d). |  |  |  |
| Priority under 35 U.S.C. § 119                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                     |                                                      |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> <li>Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>                                                                                                                                                                                                                                                            |                                                                                                                     |                                                      |  |  |  |
| Attachment(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                     |                                                      |  |  |  |
| 1) Notice of References Cited (PTO-892)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 4) Interview Summary<br>Paper No(s)/Mail D                                                                          |                                                      |  |  |  |
| <ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 5) Notice of Informal F 6) Other:                                                                                   |                                                      |  |  |  |

Application/Control Number: 10/658,648

Art Unit: 1625

## **DETAILED ACTION**

Claims 1 and 2 are pending.

The rejection of claims 1 and 2 under 35 USC 103 over JP 49043688 in view of US 5986030 has been withdrawn. Applicants argue that

Their group is attached to the benzyl ring and there is only one group, whereas JP 49-43688 has 2 substituents.

Also that Murray et al has a fluorescent group attached to it.

This is correct and hence the rejection has been withdrawn.

## New rejection:

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naphthalimide derivative JP 49043688,

JP 4712553 Noguchi et al.

GB 1003083, Toshiyasu Kasai and

GB 1054,436 Hisashi Senshu et al.

Applicants claims are drawn to naphthalimide compounds of the formula as given in claim 1.

Determination of the scope and content of the prior art (MPEP §2141.01)

JP 4712553, teaches similar compounds with 2 substitutions.

GB 1003083, Toshiyasu Kasai also teaches the same core with one substitutent.

Application/Control Number: 10/658,648

Art Unit: 1625

GB 1-54,436 also teaches naphthalimide derivative with D corresponding to the D group.

All these compounds are used as whitening agents.

GB '436 clearly teaches that they emit a greenish blue fluorescence in daylight. See lines 14-16 page 1 of the reference.

GB 1003083 also suggests that when these compounds absorb fluorescent light, they emit the absorbed light as blue light.

They all have the same utility.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

JP "553 teaches the quaternary N groups. See pages 1-7.

JP"688 also teaches the quaternary compounds .See 19 and 20 on page 7 of the reference.

Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)

The prior art teaches similar compounds for the same use. The various alkyl groups are disclosed. Along with the D group being an O and S.

One of skill in the art of making compounds for the same use would be familiar with the teachings of the art and would be motivated to modify the compounds with the different R groups to obtain the compounds of the invention.

Application/Control Number: 10/658,648

Art Unit: 1625

Conclusion

Page 4

Claims 1 and 2 are rejected.

Claims 3-31 are withdrawn.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita J. Desai whose telephone number is 571-272-0684. The examiner can normally be reached on Monday - Friday, flex time..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas McKenzie can be reached on 571-272-0670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rita J. Desai Primary Examiner Art Unit 1625 Wesa, 7

R.D. April 3, 2007